

## ASEPSIS IN ASEPTIC DRESSINGS.

The writer desires to show in the following remarks some of what he conceives to be flagrant dangers and mistakes that prevail in commerce, in the fabrication, transportation and dispensing of antiseptic wound-dressing material.

Hoping that the contrary is the case, it is conjectured that there is not an establishment in the world that puts on the market a package of aseptic (so-called) or antiseptic (so-called) gauze or cotton or catgut or silk, that the educated antiseptician could accept without a doubt as being *a priori* safe or in most cases up to the maker's representation. Nor are they, *perhaps*, tested by the severe etiquette of bacteriologic methods of investigation. For instance take "aseptic absorbent cotton;" it comes to the surgeon in packages of various bulks, done in paper envelope most often broken. Now the surgeon knows little of the method by which this cotton has been prepared. How does he know that the hands or machinery or water, etc., that fabricated it were of such a degree of cleanliness as to entitle the fabric to be labelled "aseptic" forsooth? It is transported in practically open boxes to its destination. What it may encounter in that passage in contagium and evil from air, from damp and neighboring freight, may be imagined. When the apothecary or dresser places it on dusty or dirty shelves (*i. e.* from an aseptic standpoint) or in damp and soiled drawers, how much of dangerous miscellaneous filth may it here assume? The apothecary often breaks and dispenses the package *ad libitum*. Next the doctor or surgeon has it, may be tearing off repeated pieces and using them on different kinds of wounds, possibly infected ones. The next case, say, is a parturient; all necessary care is taken otherwise, but unwittingly a piece of this now fatal cotton is used, and the mother possibly infected to a deadly septicæmia.

Should this be so? Should not the surgeon *know* whether this material had been baked or Pasteurized or not? Should it not be subjected in his hands or in the fabricator's, to the test of pure culture? Should it not be transported in a magazine that is essentially hermetic against the entrance of air, damp fluids or soil? This magazine should

be aseptic within and should be able to withstand from without the insults of passage and storage, and the mutations of the retailer and the ignorant. It should bear on its label a better voucher for sanctity, even than is required for vaccine virus. Briefly, it should be germane to all that constitutes prophylactic antisepsis of to-day. As the matter stands, one can go into any hovel, ask for a clean old towel, superheat a flat iron and with it re-iron and scorch the towel, and behold an aseptic dressing that will stand the test of pure culture better than any brand of so-called aseptic dressing that can be had from any retailer in the world.

Carbolized and sublimatized gauzes and dressings are, generally speaking, misnomers and deceptive. They doubtless were up to a certain standard when prepared, but owing to the volatility of the impregnating agents the gauze is often practically inert when it is used. Most of the sublimate gauze of commerce will not produce even so much as a mild dermatitis, though it be used with an hermetically covered bandage.

All that we have said of aseptic cotton, of magazine, envelope, etc., maintains here with equal force. But with this difference for the last, they should be so enclosed in the magazine, either with fixation agents or by the impermeable envelope or by both, that the material may retain its potentiality for months, and withstand all fluctuations of temperature, etc.

Undoubtedly some of the catgut of commerce is infected. We have seen suppuration from suture and ligature points in wounds, in which the technique, dressings, etc., seemed blameless. We have made control tests with it on dogs (sublimate technic, Scheuerlin's) with a like result, and with absorption of catgut.

In a wound or cicatrix that has had an absolutely faultless aseptic history, catgut possibly, is not absorbed or essentially metamorphosed; certainly not for months, perhaps years. Volkmann, reports a case of milzbrand infection from carbolized catgut, which had been in 20 per cent solution for months, proof in this case being *post hoc ergo propter hoc*.

Most of the powdered iodoform is not sufficiently attenuated to be

unirritating in the fresh wound and clogs any form of atomizer and in the provinces at least is adulterated.

The "isinglass court plaster," that is so in vogue with the laity and dilettante medicals, is a material most plenteously pregnant for evil. It furnishes an ideal atmosphere and pabulum for bacteria, and has sent many an unfortunate to the ground. It is questionable whether it can be disinfected so as to be safe. Phlegmon, pseudo and true erysipelas are its most usual companions. Its most frequent victim being the accommodating and officious person, (or his friends) who carries it about his person for emergencies, and who dispenses it with a "lick and a stick." General and practical directions for the performance of cauterization (*ferrum candens*) by way of warning, should accompany each packet of this universal poor man's surgical vade mecum.

A. R. JENKINS.